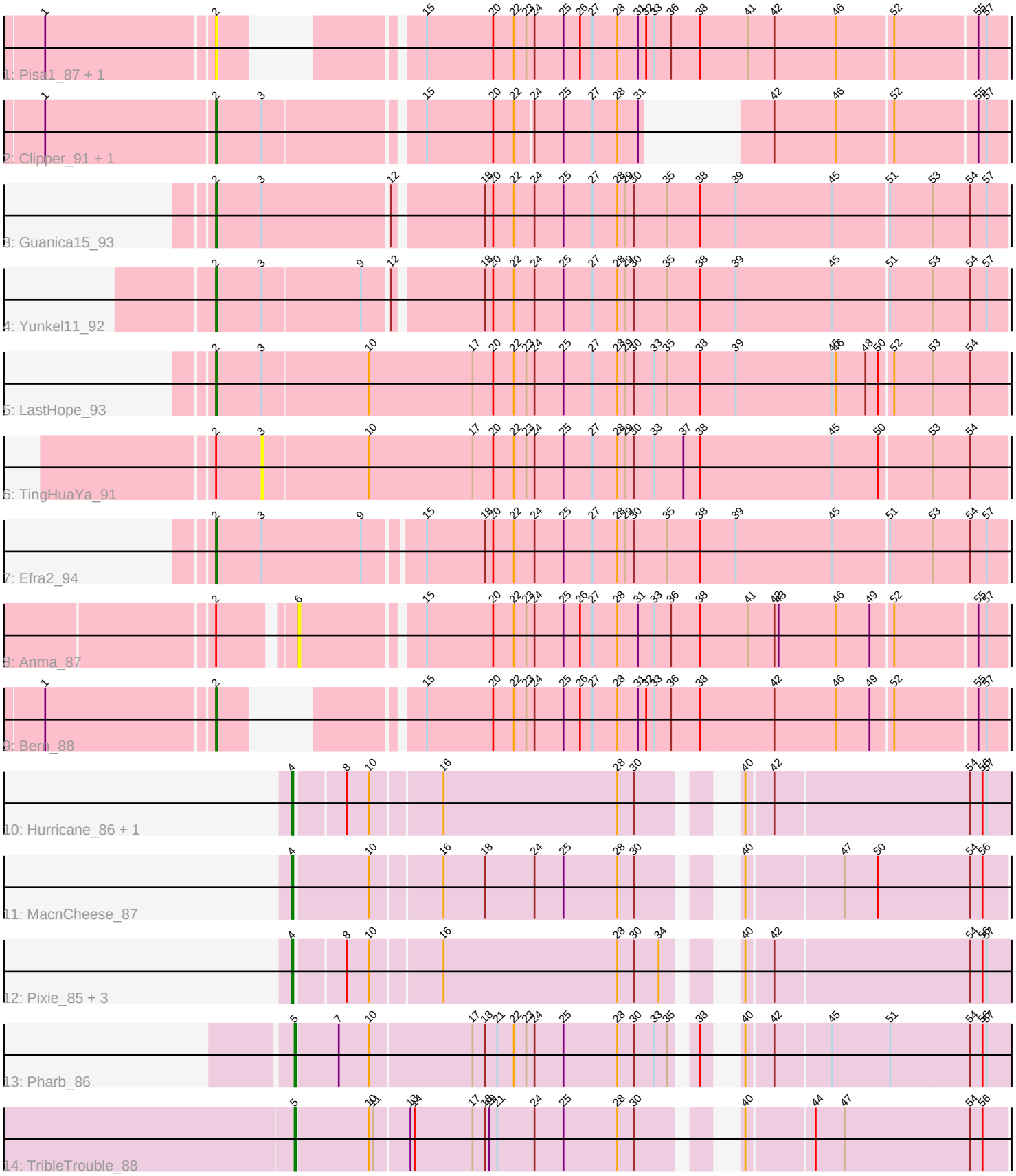
Pham 295114


1: Pisa1_87 + 1
2: Clipper_91 + 1
3: Guanica15_93
4: Yunkel11_92
5: LastHope_93
6: TingHuaYa_91
7: Efra2_94
8: Anma_87
9: Bern_88
10: Hurricane_86 + 1
11: MacnCheese_87
12: Pixie_85 + 3
13: Pharb_86
14: TribleTrouble_88

Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

Pham 295114 Report

This analysis was run 04/18/26 on database version 643.

Pham number 295114 has 20 members, 4 are drafts.

Phages represented in each track:
• Track 1 : Pisa1_87, Pisa4_81
• Track 2 : Clipper_91, MacKat_83
• Track 3 : Guanica15_93
• Track 4 : Yunkel11_92
• Track 5 : LastHope_93
• Track 6 : TingHuaYa_91
• Track 7 : Efra2_94
• Track 8 : Anma_87
• Track 9 : Bern_88
• Track 10 : Hurricane_86, Keshu_88
• Track 11 : MacnCheese_87
• Track 12 : Pixie_85, TBond007_82, ShedlockHolmes_88, Lea83_86
• Track 13 : Pharb_86
• Track 14 : TribleTrouble_88

Summary of Final Annotations (See graph section above for start numbers):

The start number called the most often in the published annotations is 4, it was called in 7 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Hurricane_86, Keshu_88, Lea83_86, MacnCheese_87, Pixie_85, ShedlockHolmes_88, TBond007_82,

Genes that have the "Most Annotated" start but do not call it:
•

Genes that do not have the "Most Annotated" start:
• Anma_87, Bern_88, Clipper_91, Efra2_94, Guanica15_93, LastHope_93, MacKat_83, Pharb_86, Pisa1_87, Pisa4_81, TingHuaYa_91, TribleTrouble_88, Yunkel11_92,

Summary by start number:

Start 2:
• Found in 11 of 20 (55.0%) of genes in pham
• Manual Annotations of this start: 7 of 16
• Called 81.8% of time when present
• Phage (with cluster) where this start called: Bern_88 (K1), Clipper_91 (K1), Efra2_94 (K1), Guanica15_93 (K1), LastHope_93 (K1), MacKat_83 (K1), Pisa1_87 (K1), Pisa4_81 (K1), Yunkel11_92 (K1),

Start 3:
• Found in 7 of 20 (35.0%) of genes in pham
• No Manual Annotations of this start.
• Called 14.3% of time when present
• Phage (with cluster) where this start called: TingHuaYa_91 (K1),

Start 4:
• Found in 7 of 20 (35.0%) of genes in pham
• Manual Annotations of this start: 7 of 16
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Hurricane_86 (K3), Keshu_88 (K3), Lea83_86 (K3), MacnCheese_87 (K3), Pixie_85 (K3), ShedlockHolmes_88 (K3), TBond007_82 (K3),

Start 5:
• Found in 2 of 20 (10.0%) of genes in pham
• Manual Annotations of this start: 2 of 16
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Pharb_86 (K3), TribleTrouble_88 (K3),

Start 6:
• Found in 1 of 20 (5.0%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Anma_87 (K1),

Summary by clusters:

There are 2 clusters represented in this pham: K3, K1,

Info for manual annotations of cluster K1:
•Start number 2 was manually annotated 7 times for cluster K1.

Info for manual annotations of cluster K3:
•Start number 4 was manually annotated 7 times for cluster K3.
•Start number 5 was manually annotated 2 times for cluster K3.

Gene Information:

Gene: Anma_87 Start: 55830, Stop: 56321, Start Num: 6
Candidate Starts for Anma_87:
(Start: 2 @55782 has 7 MA's), (6, 55830), (15, 55911), (20, 55959), (22, 55974), (23, 55983), (24, 55989), (25, 56010), (26, 56022), (27, 56031), (28, 56049), (31, 56064), (33, 56076), (36, 56088), (38,

56109), (41, 56142), (42, 56160), (43, 56163), (46, 56205), (49, 56229), (52, 56244), (55, 56301), (57, 56307),

Gene: Bern_88 Start: 54011, Stop: 54514, Start Num: 2
Candidate Starts for Bern_88:
(1, 53894), (Start: 2 @54011 has 7 MA's), (15, 54104), (20, 54152), (22, 54167), (23, 54176), (24, 54182), (25, 54203), (26, 54215), (27, 54224), (28, 54242), (31, 54257), (32, 54263), (33, 54269), (36, 54281), (38, 54302), (42, 54353), (46, 54398), (49, 54422), (52, 54437), (55, 54494), (57, 54500),

Gene: Clipper_91 Start: 56263, Stop: 56739, Start Num: 2
Candidate Starts for Clipper_91:
(1, 56143), (Start: 2 @56263 has 7 MA's), (3, 56296), (15, 56401), (20, 56449), (22, 56464), (24, 56476), (25, 56497), (27, 56518), (28, 56536), (31, 56551), (42, 56578), (46, 56623), (52, 56662), (55, 56719), (57, 56725),

Gene: Efra2_94 Start: 56866, Stop: 57423, Start Num: 2
Candidate Starts for Efra2_94:
(Start: 2 @56866 has 7 MA's), (3, 56899), (9, 56971), (15, 57010), (18, 57052), (20, 57058), (22, 57073), (24, 57088), (25, 57109), (27, 57130), (28, 57148), (29, 57154), (30, 57160), (35, 57184), (38, 57208), (39, 57232), (45, 57301), (51, 57340), (53, 57370), (54, 57397), (57, 57409),

Gene: Guanica15_93 Start: 56558, Stop: 57112, Start Num: 2
Candidate Starts for Guanica15_93:
(Start: 2 @56558 has 7 MA's), (3, 56591), (12, 56681), (18, 56741), (20, 56747), (22, 56762), (24, 56777), (25, 56798), (27, 56819), (28, 56837), (29, 56843), (30, 56849), (35, 56873), (38, 56897), (39, 56921), (45, 56990), (51, 57029), (53, 57059), (54, 57086), (57, 57098),

Gene: Hurricane_86 Start: 54730, Stop: 55197, Start Num: 4
Candidate Starts for Hurricane_86:
(Start: 4 @54730 has 7 MA's), (8, 54763), (10, 54778), (16, 54826), (28, 54952), (30, 54964), (40, 55012), (42, 55030), (54, 55168), (56, 55177), (57, 55180),

Gene: Keshu_88 Start: 55022, Stop: 55489, Start Num: 4
Candidate Starts for Keshu_88:
(Start: 4 @55022 has 7 MA's), (8, 55055), (10, 55070), (16, 55118), (28, 55244), (30, 55256), (40, 55304), (42, 55322), (54, 55460), (56, 55469), (57, 55472),

Gene: LastHope_93 Start: 56273, Stop: 56836, Start Num: 2
Candidate Starts for LastHope_93:
(Start: 2 @56273 has 7 MA's), (3, 56306), (10, 56381), (17, 56456), (20, 56471), (22, 56486), (23, 56495), (24, 56501), (25, 56522), (27, 56543), (28, 56561), (29, 56567), (30, 56573), (33, 56588), (35, 56597), (38, 56621), (39, 56645), (45, 56714), (46, 56717), (48, 56738), (50, 56747), (52, 56756), (53, 56783), (54, 56810),

Gene: Lea83_86 Start: 54851, Stop: 55318, Start Num: 4
Candidate Starts for Lea83_86:
(Start: 4 @54851 has 7 MA's), (8, 54884), (10, 54899), (16, 54947), (28, 55073), (30, 55085), (34, 55103), (40, 55133), (42, 55151), (54, 55289), (56, 55298), (57, 55301),

Gene: MacKat_83 Start: 51147, Stop: 51623, Start Num: 2
Candidate Starts for MacKat_83:
(1, 51027), (Start: 2 @51147 has 7 MA's), (3, 51180), (15, 51285), (20, 51333), (22, 51348), (24, 51360), (25, 51381), (27, 51402), (28, 51420), (31, 51435), (42, 51462), (46, 51507), (52, 51546), (55,

51603), (57, 51609),

Gene: MacnCheese_87 Start: 55279, Stop: 55746, Start Num: 4
Candidate Starts for MacnCheese_87:
(Start: 4 @55279 has 7 MA's), (10, 55330), (16, 55378), (18, 55408), (24, 55444), (25, 55465), (28, 55504), (30, 55516), (40, 55564), (47, 55630), (50, 55654), (54, 55720), (56, 55729),

Gene: Pharb_86 Start: 54652, Stop: 55125, Start Num: 5
Candidate Starts for Pharb_86:
(Start: 5 @54652 has 2 MA's), (7, 54682), (10, 54703), (17, 54775), (18, 54784), (21, 54793), (22, 54805), (23, 54814), (24, 54820), (25, 54841), (28, 54880), (30, 54892), (33, 54907), (35, 54916), (38, 54928), (40, 54940), (42, 54958), (45, 54997), (51, 55039), (54, 55096), (56, 55105), (57, 55108),

Gene: Pisa1_87 Start: 55884, Stop: 56387, Start Num: 2
Candidate Starts for Pisa1_87:
(1, 55767), (Start: 2 @55884 has 7 MA's), (15, 55977), (20, 56025), (22, 56040), (23, 56049), (24, 56055), (25, 56076), (26, 56088), (27, 56097), (28, 56115), (31, 56130), (32, 56136), (33, 56142), (36, 56154), (38, 56175), (41, 56208), (42, 56226), (46, 56271), (52, 56310), (55, 56367), (57, 56373),

Gene: Pisa4_81 Start: 51253, Stop: 51756, Start Num: 2
Candidate Starts for Pisa4_81:
(1, 51136), (Start: 2 @51253 has 7 MA's), (15, 51346), (20, 51394), (22, 51409), (23, 51418), (24, 51424), (25, 51445), (26, 51457), (27, 51466), (28, 51484), (31, 51499), (32, 51505), (33, 51511), (36, 51523), (38, 51544), (41, 51577), (42, 51595), (46, 51640), (52, 51679), (55, 51736), (57, 51742),

Gene: Pixie_85 Start: 54434, Stop: 54901, Start Num: 4
Candidate Starts for Pixie_85:
(Start: 4 @54434 has 7 MA's), (8, 54467), (10, 54482), (16, 54530), (28, 54656), (30, 54668), (34, 54686), (40, 54716), (42, 54734), (54, 54872), (56, 54881), (57, 54884),

Gene: ShedlockHolmes_88 Start: 54857, Stop: 55324, Start Num: 4
Candidate Starts for ShedlockHolmes_88:
(Start: 4 @54857 has 7 MA's), (8, 54890), (10, 54905), (16, 54953), (28, 55079), (30, 55091), (34, 55109), (40, 55139), (42, 55157), (54, 55295), (56, 55304), (57, 55307),

Gene: TBond007_82 Start: 54432, Stop: 54899, Start Num: 4
Candidate Starts for TBond007_82:
(Start: 4 @54432 has 7 MA's), (8, 54465), (10, 54480), (16, 54528), (28, 54654), (30, 54666), (34, 54684), (40, 54714), (42, 54732), (54, 54870), (56, 54879), (57, 54882),

Gene: TingHuaYa_91 Start: 56631, Stop: 57164, Start Num: 3
Candidate Starts for TingHuaYa_91:
(Start: 2 @56598 has 7 MA's), (3, 56631), (10, 56706), (17, 56781), (20, 56796), (22, 56811), (23, 56820), (24, 56826), (25, 56847), (27, 56868), (28, 56886), (29, 56892), (30, 56898), (33, 56913), (37, 56934), (38, 56946), (45, 57042), (50, 57075), (53, 57111), (54, 57138),

Gene: TribleTrouble_88 Start: 56688, Stop: 57158, Start Num: 5
Candidate Starts for TribleTrouble_88:
(Start: 5 @56688 has 2 MA's), (10, 56739), (11, 56742), (13, 56766), (14, 56769), (17, 56811), (18, 56820), (19, 56823), (21, 56829), (24, 56856), (25, 56877), (28, 56916), (30, 56928), (40, 56976), (44, 57021), (47, 57042), (54, 57132), (56, 57141),

Gene: Yunkel11_92 Start: 56143, Stop: 56694, Start Num: 2

Candidate Starts for Yunkel11_92:
(Start: 2 @56143 has 7 MA's), (3, 56176), (9, 56245), (12, 56263), (18, 56323), (20, 56329), (22, 56344), (24, 56359), (25, 56380), (27, 56401), (28, 56419), (29, 56425), (30, 56431), (35, 56455), (38, 56479), (39, 56503), (45, 56572), (51, 56611), (53, 56641), (54, 56668), (57, 56680),